APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/892,810	06/27/2001	Bernard A. King-Smith	POU920000119US1	3513

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Blanche E. Schiller, Esq.
HESLIN & ROTHENBERG, P.C.
5 Columbia Circle
Albany, NY 12203

EXAMINER
SORRELL, ERON J

ART UNIT	PAPER NUMBER
2182	7

DATE MAILED: 05/24/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
Office Action Summary	09/892,810	KING-SMITH ET AL.
	Examiner	Art Unit	
	Eron J Sorrell	2182	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on _03 March 2004_.
2a) ☒ This action is **FINAL**.   2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) _1-9,11-29,31-51, and 53-62_ is/are pending in the application.
   4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) _1-9,11-29,31-51 and 53-62_ is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on _27 June 2001_ is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
    a) ☐ All   b) ☐ Some * c) ☐ None of:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. _____.
    3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)
1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1.   The following is a quotation of 35 U.S.C. 103(a) which

forms the basis for all obviousness rejections set forth in this

Office action:

> (a) A patent may not be obtained though the invention is not identically
> disclosed or described as set forth in section 102 of this title, if the
> differences between the subject matter sought to be patented and the prior
> art are such that the subject matter as a whole would have been obvious at
> the time the invention was made to a person having ordinary skill in the
> art to which said subject matter pertains. Patentability shall not be
> negatived by the manner in which the invention was made.

2.   Claims 1,3-12,16-19,21,23-32,36-39,43,45-54, and 58-61 are

rejected under 35 U.S.C. 103(a) as being unpatentable over the

paper "Automatic TCP Buffer Tuning" by Mathis et al.

(hereinafter "Mathis") in view of Braddy U.S. Patent No.

6,304,967).

3.   Referring to method claim 1, system claim 21, and computer

readable medium claim 43, Mathis teaches a method and system of

tuning sockets of a clustered computing environment, the method

and system comprising:

means for dynamically determining information relating to a

current configuration of the computing environment (see 6th

paragraph of section 1); and

means for setting one or more parameters of a socket of the computing environment based on the dynamically determined information (see 6th paragraph of section 1; Note the tuning of buffer sizes is the parameter setting).

Mathis fails to teach obtaining, by an application of the clustered computing environment, a value indicating a number of remote sockets to be opened.

Braddy teaches a clustered computing environment wherein it is obtained, by an application of the clustered computing environment, a value indicating a number of remote sockets to be opened (see paragraph bridging columns 9 and 10).

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to modify the system and method of Mathis with the above teachings of Braddy such that it obtains, by an application of the clustered computing environment, a value indicating a number of remote sockets to be opened and sets one or more parameters of the computing environment based on the dynamically obtained information and the obtained value. One of ordinary skill in the art would have been motivated to make such modification in order to evenly distribute client requests among the server computer system as suggested by Braddy (see lines 55-67 of column 6).

4. Referring to method claims 3 and 4, system claims 23 and
24, and computer readable medium claims 45 and 46, Mathis
teaches the one or more parameters comprise a size of a send
buffer of the socket (see first and second paragraph of section
2.2) and the size of the receive buffer of the socket (see 3rd
paragraph of section 2.1).

5. Referring to claim method claim 5, system claim 25, and
computer readable medium claim 47, Mathis teaches the
dynamically determining comprises determining a maximum amount
of data that can be sent by the socket based on the current
configuration (see 3rd paragraph of section 2.1).

6. Referring to method claims 6 and 8, system claim 26 and 28,
and computer readable medium claim 48 and 50, Mathis teaches the
information comprises information related to the network of the
clustered computing environment coupled to the socket and
information relating to the socket (see Mathis, 5th paragraph of
section 1; Note the available memory is information related to
the socket).

7.   Referring to claim 7, system claim 27, and computer
readable medium claim 49, Mathis teaches the information related
to the network comprises at least one of the network adapter
maximum segment size and the adapter transfer limit (see
paragraph 4 of section 2.1; Note the system maximum buffer size
is the maximum segment size).

8.   Referring to method claim 9, system claim 29, and computer
readable claim 51, Mathis teaches the information comprises at
least one of a current socket send buffer size, a current socket
receive buffer size, and a current maximum buffer limit (i.e.
memory availability) (see 5th paragraph of section 1).

9.   Referring to method claim 11, system claim 31, and computer
readable medium claim 53, Mathis teaches the clustered computing
environment includes an indeterminate number of sockets (see
Mathis 4th paragraph of section 1; Note Examiner is relying on
applicant's definition of "indeterminate" found in paragraph
0017 on page 5 of the instant application.)

10.   Referring to method claim 12, system claim 32, and computer
readable medium claim 54, Mathis teaches the computing
environment includes a plurality of networks (see figure 2).

11.   Referring to method claim 16, system claim 36, and computer
readable medium claim 58, Mathis fails to teach the setting is
performed by one node of the clustered computing environment
being connected to by another node initiating a socket
connection with the one node, wherein the socket is local to the
one node.

Braddy teaches a method and system wherein the setting is
performed by a node of the computing environment being connected
to by another node initiating a socket connection with the node,
wherein the socket is local to a node (see lines 54 of column 9
to lines 8 column 10).

It would have been obvious to one of ordinary skill in the
art at the time of the applicant's invention to modify the
system and method of Mathis with the teachings of Braddy such
that the setting is performed by a node of the computing
environment being connected to by another node initiating a
socket connection with the node, wherein the socket is local to
a node. One of ordinary skill in the art would have been
motivated to make such modification in order to provide a
central location to distribute, monitor and manage information
requests as suggested by Braddy (see lines 18-35 of column 6).

12.   Referring to method claim 17, system claim 37, and computer

readable medium claim 59, Mathis discloses the size of the send

buffer socket is based on the number of remote sockets to be

opened (see paragraph 2 of section 1.3).

13.   Referring to method claims 18 and 19, system claims 38 and

39, and computer readable medium claims 60 and 61, Mathis

teaches the send and receive buffer of the socket based on the

maximum buffer limit of the socket and the amount of data that

can be received, respectively (see paragraph 3 of section 2.1

and paragraphs 1 and 2 of section 2.3).

14.   Claims 2,20,22,40-42,44, and 62 are rejected under 35

U.S.C. 103(a) as being unpatentable over Mathis in view of

Braddy as applied to claims 1,21, and 43 and further in view of

Gupta et al. (U.S. Patent No. 6,405,252 hereinafter "Gupta").

15.   Referring to method claim 2, system claim 22, and computer

readable medium claim 44, the combination of Mathis and Braddy

fails to teach that the dynamically determining is performed in

response to opening the socket.

    Gupta teaches a method and system wherein network

configuration information is dynamically determined and is

performed in response to opening the socket (see lines 49-58 of column 14).

It would have been obvious to one of ordinary skill in the art at the time of the applicant's invention to modify the combination of Mathis and Braddy with the teachings of Gupta such that the dynamically determining is performed in response to opening the socket. One of ordinary skill in the art would have been motivated to make such modifications because this is when the system available memory is changed.

16. Referring to method claim 20, see discussion of claims 1,2,6, and 8, as claim 20 is just a combination of those claims.

17. Referring to system claims 40-42, see discussion of claim 21, 22,26, and 28, as claims 40-42 are just combinations of those claims.

18. Referring to claim 62, see discussion of claim 43,44,48, and 50, as claim 62 is just a combination of those claims.

19. Claims 13-15, 33-35, and 55-57 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mathis in view Braddy as

applied to claims 1,21, and 43 above and further in view of

Eckley et al. (U.S. Patent No. 6,163,797 hereinafter "Eckley").

20. Referring to method claim 13, system claim 33, and computer

readable claim 55, the combination of Mathis and Braddy fails to

teach the setting is performed by a node of the clustered

computing environment initiating a socket connection with

another node of the clustered computing environment, and wherein

the socket is local to the initiating node.

Eckley teaches, in an analogous method and system, that the

setting is performed by a node of the clustered computing

environment initiating a socket connection with another node of

the clustered computing environment, and wherein the socket is

local to the initiating node (see lines 58 of column 8 to line

10 of column 9).

It would have been obvious to one of ordinary skill in the

art at the time of the applicant's invention to modify the

combination of Mathis and Braddy with the teaching of Eckley

such that the setting is performed by a node of the computing

environment initiating a socket connection with another node of

the computing environment, and wherein the socket is local to

the initiating node. One of ordinary skill in the art at the

time of the applicant's invention would have been motivated to

make such modification in order for connections to a server to
be initiated from a client machine as suggested by Eckley (see
lines 58 of column 8 to line 10 of column 9).

21.   Referring to method claim 14, system claim 34, and computer
program claim 56, Mathis teaches the setting comprises setting a
size a send buffer of the socket based on at least one of
desired amount of data streaming through the send buffer, an
amount of data that can be transmitted, and a maximum buffer
limit of the socket (see first two paragraphs of section 2.2).

22.   Referring to method claim 15, system claim 35, and computer
readable medium claim 57, Mathis teaches the setting comprises
setting a size of a receive buffer of the socket such that the
size does not exceed a maximum buffer limit of the socket (see
3rd paragraph of section 2.1).

Response to Arguments

23.   Applicant's arguments with respect to claims 1-62 have been
considered but are moot in view of the new ground(s) of
rejection.

Conclusion

24. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL.** See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eron J Sorrell whose telephone number is 703 305-7800. The examiner can normally be reached on Monday-Friday 9:00AM - 5:30PM.
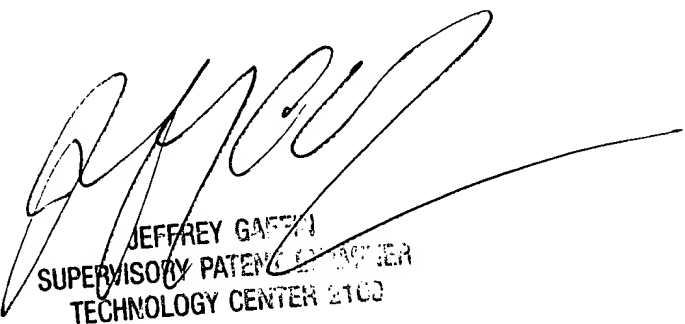
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffrey A Gaffin can be

reached on 703 308-3301. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

EJS
May 19, 2004

JEFFREY GAFFIN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100